| Nelles, Dr. Maurice,<br>vice president and<br>director, American<br>Electronics Inc. |
|--|
| (author)   |
| Recruiting10:43  |
| The New Geography of Technology5:33  |
| Technology   |
| Nuclear Energy:<br>Is Industry Ready for<br>the Atom?2:35                            |
| 0  |
| ocean, radioactive wastes in   |
| oceanographic research   |
| odor detection7:24   |
| oil diffusion pumps6:66  |
| olfactometry7:24 one-coat organosois \$:73   |
| ontics 8-17  |
| Owen, Dr. Louis J.,<br>general manager,<br>Plastics Div.,<br>Nopco Chemical Co.      |
| (author)10:22  |
| P  |
| packaging9:71; 10:22<br>paint9:71  |
| Particle Pipelines5:24   |
| patent ownership 3-38  |
| Pestrecov, Dr. K.,<br>technical staff,   |
| Northrop Corp.   |
| (author)8:17 petrochemical   |
| industry4:37; 5:35<br>petroleum  |
| industry3:35; 5:34<br>Pfenninger, Arnold,  |
| vice president of  |
| engineering, Quantum<br>Inc. (author)5:36  |
| phenolics for coatings 9:72<br>phosphorus and  |
| polymers9:67   |
| photogrammetry 9.18  |
| photogrammetry   |
| photomultiplier  |
| ion gage 9.32  |
| Picard, Dr. Robert G.,<br>vice president, Cenco<br>Instruments Corp.                 |
| (author)   |
| pistons9:26  |
| plasma motors1:30  |
| plastics   |
| coatings9:72 polyethylene  |
| coatings9:72<br>polymers5:28; 9:60, 64   |
| polyols 10:24  |
| Preston, Seaton, I+R associate editor (author)3:32; 6:80                             |
| Prince, George M.,<br>vice president, Invention                                      |
| Research Group<br>(author)11:34  |
| Promise of Ceramics11:17   |
| propulsion,<br>rocket1:27, 33; 4:41; 5:29<br>proton synchrotron,                     |
| adhesives in9:59<br>pumps6:66; 10:18   |
| DUMDOS 5:50: 18:18   |

| purity, zone freezing and5:36                                     |
|---|
| R   |
| radar10:20  |
| radioactive wastes8:27  |
| Radioisotopes: For Control and Measurement6:46                    |
| Rechsteiner, Emil B.,<br>Technology Markets<br>Inc. (author)16:14 |
| recruiting of personnel1:22: 10:43                                |
| recrystallizers6:44   |
| refractory metals1:39; 8:36                                       |
| refrigerated trucks10:23  |
| Research Becomes A  |
| Basic Industry1:18  |
| research and<br>development1:18, 22; 3:17;<br>5:33; 6:52; 7:28    |
| in Boston4:25   |
| espionage in4:21  |
| joint ventures4:36  |
| laboratories3:27;   |
| 6:40; 8:33, 40  |
| unionism in0:33   |
| resonant cavities3:25   |

| The Science of Useful Sound6:72           |
|---|
| sealants9:56                              |
| seeding of atmosphere10:38                |
| Selling Research to the Government7:28    |
| semiconductors2:32;<br>4:15; 5:28; 6:81   |
| semimetals4:19                            |
| servomotors, selecting6:61                |
| shadowgraphs7:22                          |
| shock events7:22                          |
| silica9:28                                |
| silicon4:15; 6:83                         |
| silicon carbide4:17                       |
| silicones9:66, 73                         |
| simulation,<br>environmental1:27; 6:64    |
| The Small Computer as a Research Tool6:58 |
| solar simulation6:70                      |
| solid fuels1:27, 33; 4:41                 |
| sonar                                     |
| sound6:72                                 |
| space                                     |
|   |

## INDEX TO VOLUME FOUR (1962)

Bold face type refers to titles of feature articles. Heavy numerals refer to issue numbers in Volume four; light numerals indicate page numbers. For index to: Volume one (1959), see pages 100 and 101 in Vol. 1, No. 4; Volume two (1960), see pages 67 and 68, Vol. 2, No. 6; Volume three (1961), see pages 53 and 54, Vol. 3, No. 6, Industrial Research.

| oby, Leslie E., manager,<br>advanced product<br>planning, Amphenol-Borg<br>Electronics Corp. 9:30<br>(author) 9:30<br>ockets 1:27, 33;<br>4:41; 5:19, 29 | environmental simulation   |
|--|--|
| and atmospheric seeding  | spectroscopy16:20; 11:2<br>Spectroscopy in Research<br>and Production<br>Control |
| lod, Robert L., chairman, Acoustica Associates Inc. (author)   | Sprague, Philip A.,<br>president, Instrument<br>Society of America<br>(author)   |
| president, Bradley & Vrooman Co. (author)9:71 losenberg, Dr. Robert A., director of applied science, Mitron Research & Development                       | sputter-ion pumps  |
| Corp. (author)   | Div., Eastman Kodak Co. (author)   |
|  | Stern, Isidore,<br>Standardization &<br>Technical Services Div.,                 |
| alaries for innovators   | Naval Construction Battalion Center (author)                                     |
| Div., Nuclear Chicago<br>Corp. (author)6:46  | strain gages6:1  |

| stroboscope7:21   |
|---|
| Superconductivity3:22   |
| surgery   |
| sutures, surgical5:27   |
| switching time2:27  |
| symbols, automata and2:17   |
| Synectics—An Exciting<br>New Approach to<br>Problem Solving   |
| T   |
| TV tubes9:59  |
| tantalum8:36  |
| thermal expansion9:19, 77   |
| thermistors6:83   |
| thermoelectrics4:17 time, computers and2:27   |
| time, computers and2:27   |
| titanium dioxide4:17  |
| titrators   |
| tracer gas  |
| trade, foreign2:29; 5:33<br>transducers5:31; 6:80   |
| Transducers: Key to More Reliable   |
| Test Data6:80   |
| transformers, cryogenic3:24   |
| transistors2:32; 4:15; 5:28   |
| Trapping Time with  |
| Trapping Time with Photography7:15  |
| Trend of the Revolution:<br>Automation in the   |
| Laboratory  |
| The Truth About Solid State Materials4:14   |
| State Materials4:14   |
| tungsten8:36  |
| tunnel diodes2:27; 5:31   |
| tunneltron3:25  |
| U   |
| •   |
| ultrasonics   |
| ultrasonics   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33  |
| ultrasonics   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33  |
| ultrasonics   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W wastes, radioactive 8:27  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44   |
| Ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20   |
| Ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors   |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38   |
| Ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 8:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L. Applies Research  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L., Applies Research Laboratories Inc.  |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L., Applies Research Laboratories Inc. (author) 11:28 Wyatt. M. M. I-R                |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L., Applies Research Laboratories inc. (author) 11:28 Wyatt, M. M., I=R associate editor |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V  vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management .1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W  wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L., Applies Research Laboratories Inc. (author) 11:28 Wyatt. M. M. I-R                |
| ultrasonics 6:72 Unionism in the Laboratory 8:33 Urethane Foam 10:22  V vacuums 6:64 vaporization, lasers and 10:20 The Versatile Pipeline 10:35 Vexing Environment for Technical Management 1:22 vinyl dispersion coatings 9:72 vitrification of atomic wastes 8:30  W wastes, radioactive 8:27 wave mechanics 9:17 weighing, automated 6:44 welding 6:77; 9:79; 10:20 Where to Build A Research Lab 3:27 Whitney, Frank L., president, Walter Kidde Constructors Inc. (author) 8:40 Who Owns Invention? 3:38 Winchester, Charles L., Applies Research Laboratories inc. (author) 11:28 Wyatt, M. M., I=R associate editor |

Zone Freezing ..........5:36